



Skills for development and vocational education and training: Current and emergent trends

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ABSTRACT

In 2012, IJED published a special issue on vocational education and training and development that reflected the sense of being at a potential turning point for policy, practice and research in this area as UNESCO convened the Third International Conference on Technical and Vocational Education and Training. A decade on, we reflect on the way that the research literature has evolved in this period, suggesting a five-fold typology of literature that seeks to explore the VET-development relationship. First, we note that the vast majority of research published on VET in developing countries is practice-focused, concerned with improving classrooms, curricula and colleges, largely in the public sector. Whilst it considers VET in development contexts, it is typically not concerned with questions about the relationship between VET and development. Second, there is a well-established literature that provides an economic analysis of skills development in the Global South. As, we explain in the paper, this has two main strands: one from the supply and the other from the demand side. The former focuses on the cost-efficiency of the VET system, while the latter pays attention to the labour market demands for skills and education. Third, there is a constructivist tradition in which researchers emphasise empirically observing ways skills are demanded and used in the lives of people who embody them, instead of taking the models and logic of the public VET structure and educational programmes as paramount. Fourth, the political economy of skills tradition is concerned with the rules of how skills development operates, with a strong historical and comparative sensibility. Fifth, we identify a “post-political economy of skills”, which seeks to build from the political economy tradition through drawing on diverse theoretical influences, such as critical realism, political ecology and the capabilities approach. We argue that this pluralism is to be welcomed but, nonetheless, advocate for better dialogue across these traditions.

1. Background

Over recent decades, the interplay between vocational education and training (VET) and the demand for industrial skills has become a high-priority concern among academics and policymakers. For the governments of developing countries aspiring for economic catch-up, increased investments in VET appear a straightforward solution. However, complaints regarding gaps between industry and education never cease. Indeed, some argue that there is an inherent tension between the educational and economic logics that are at play in VET (e.g., [Allais and Wedekind, 2020](#)).

Many actors fear that these gaps are in the process of being further exacerbated by rapid technological and industrial change. However, the challenges for VET go further. In many countries, North and South, entry

to stable formal sector employment is an increasingly slender hope for youth, whilst large numbers of adults are unable to maintain decent employment once achieved. The climate crisis means there is growing attention both to how skills, jobs and work can be greener and to the role that VET has played in contributing to the climate changing effects of the Anthropocene. In many parts of the world too, VET has been complicit in inequalities and injustices of gender, race, disability, etc. Moreover, there are renewed criticisms that VET has become too focused on skills for employability and productivity, and has forgotten its long-established role in transitions to adulthood and citizenship.

Skills development sits at the nexus of multiple Sustainable Development Goals (SDGs). The most obviously relevant one would be SDG4, in which target 3 highlights the improved access to VET and higher education, and target 4 is on skills and knowledge for decent work and

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employment. However, it is also relevant to SDGs 8 (decent and sustainable employment) and 9 (industrialisation and innovation), and a necessary foundation for the achievement of other goals whether they be about health, cities or water.

Much has changed since the last IJED special issue on VET in 2012. Not only have the SDGs arrived but there has been the rise of a number of new strands of skills research, such as constructivist skills analysis, the critical capabilities approach to VET, and the green skills account. This has been part of a rejuvenation of research in the field. Whereas in 2000 there was next to no research on VET in the South funded by academic sources such as research councils, there have been major investments in this area by a number of such bodies. There has also been considerable strengthening of skills research capacity in a small number of Southern countries around high profile research chairs. This special issue brings together some of the best of this new wave of research, deliberately featuring diverse voices (from East, West; North, South), drawing on a variety of theoretical/methodological traditions and covering a diverse set of empirical contexts.

The 2012 special issue needs to be located in a particular moment in policy debates about VET. The Education for All era had led to an overall discourse of aid to education in which VET was marginalised in favour of primary schooling (Jones, 1992; King, 1992). However, some donors (e.g., Germany, Switzerland and Japan) and many Southern governments continued to believe that skills development was a crucial tool of overall development policy. By the start of the 2010 s, UNESCO saw its next World Conference on Technical and Vocational Education and Training, which was scheduled to be hosted by the People's Republic of China in 2012, as an opportunity to revisit this debate. Armed with considerable evidence of ongoing VET reform internationally, and mindful of the likelihood that the planned SDGs would include a concern with industrial development, UNESCO was determined to use the conference to wrest back leadership of international VET policy from the World Bank. Moreover, it saw the possibility here of amplifying emerging arguments that stressed not just the economic purpose of skills but also environmental and equity dimensions (UNESCO, 2012).

Thus, the special issue was published at a point of optimism about a new era of VET and development work, and some of the papers (e.g., Allais, 2012; McGrath, 2012; McGrath and Lugg, 2012) sought to develop a set of new theoretical and analytical tools for the task ahead.

The current special issue was envisaged as a reflection on what happened in the decade following the Shanghai Conference. We have seen both an increased government and donor focus on skills issues, and a significant rise in funding for academic research on VET and development over this decade. The emerging trends at the time of the last special issue have developed further, and new strands have emerged subsequently. Hence, this special issue considers what we have learnt in that time and where the field might go in the future. In this introduction, we reflect on these questions, whilst noting that a number of donors have again reduced their VET programme funding and that one major source of research funding (supporting four of the papers in this issue) has dried up.

At the heart of this introduction is a typology of five main trends in the literature. All are reflected in the special issue, although the bulk of our attention concentrates on two newer approaches, which we are calling the “constructivist account of skills” and the “post-political economy of skills”. We then go on to evaluate the state of the field and discuss its likely next developments.

However, before moving to the state of the recent literature, it is important to recall the criticisms raised against VET in the 1980 s and 1990 s, as many of these remain worthy of consideration when reading what follows.

2. Changing global trends regarding VET as a policy measure and the criticism against it

From the 1950 s to mid-1970 s, VET was among the most promoted

educational subsectors by the international development partners as a means to provide the human resources needed for the development of newly independent Southern states. It was seen as self-evident that these countries would achieve industrial and economic take-off, and that skills development would be a necessary element of this. For example, between 1963 and 1976, secondary level VET received the highest share (23%) of the World Bank's education loans, and VET as a whole, including tertiary and nonformal education, accounted for a slight majority (51%) of such loans (Jones, 1992). However, VET increasingly faced criticism for its inability to cultivate human resources effectively and efficiently and for further entrenching social and economic inequalities by placing learners on separate and unequal tracks. However, more significant was the failure of the expected rapid industrialisation of much of the South.

In societies where the school system was introduced later and expanded in a shorter period than in the West, school is often considered a channel to access white-collar employment in the formal sector (cf. Foster, 1965). In such cases, VET tends to be seen as the inferior track of education, which results in its lack of attraction to good students and their parents (Ozer and Perc, 2020) and unfavourable evaluation in the labour market (Oproi and Litoi, 2019). It is partly because of such social responses that VET does not perform highly.

At the same time, running a VET institution and keeping up its facilities and equipment with the latest requirements in the world of work is costly. Therefore, the impact of its education compared to the size of investment (the rate of return) has always been an issue of debate (Psacharopoulos, 1993; Lauglo, 2010).

Another challenge of VET is the smooth transition of its graduates to the world of work (UNICEF, 2019), which is, on the one hand, a matter of curricular relevance to the fast-changing skills demands in the workplace, while on the other hand, of the matching between the graduates and job opportunities, shaped in turn by economic cycles and perturbations. There is always a time lag between curricular design and application. Meanwhile, the demand for skills and knowledge in the world outside of school is in constant flux, which makes the matching of two worlds - of school and of workplace - difficult.

Whilst the start of the EFA era appeared to mark the end of a VET focus, in reality it rather shifted the loci of attention. Some concern with public VET did continue as the wider governance turn in development policy and practice resulted in a series of VET governance reforms (as charted in McGrath and Lugg's paper in the previous SI) that focused on making provision more market-driven. However, two other trends emerged that were concerned with the knowledge and skills needed for economic success and social inclusion. On the one hand, this discourse was focused on education more generally and on fostering problem-solving skills among “21st-century learners” facing the “knowledge economy” (Griffin et al., 2011; Yamada, 2016a). On the other, attention shifted to learning in workplaces (World Bank, 2018). At the project level, skills interventions by donors were more likely to be understood as part of active labour market interventions and consisted largely of short duration programmes to tackle unemployment and promote entrepreneurship.

As VET moved up the development policy agenda around the start of the SDG period, two World Bank working papers in this genre came to prominence in international development agency internal debates: Blattman and Ralston (2015) and McKenzie (2017). Indeed, one of us was commissioned by the UK Department for International Development to develop an evidence-based response to this work that was to be used to inform agency staff of the wider debate that these papers were perceived to be distorting. The former provided a systematic review of evidence on labour market and entrepreneurship programmes globally and the latter on active labour market policies. Both argued that skills programmes showed very limited positive effects, especially for men. However, as McGrath (2016) countered, the first of these systematic reviews had multiple flaws, an argument that applied also to the report of the following year. At the heart of the problem was that they focused

on a very small (and non-representative) sample of a specific type of intervention, as noted above: externally funded, short-duration vocational programmes in settings where there was an unemployment crisis, but generalised these findings to other contexts and types of programme, including conventional public VET programmes.

We needed to have this brief historical overview of aid to VET/skills as much of what has happened in policy, practice and research on VET and development is hugely shaped by these trends. As far as research is concerned, much of it has been donor funded or, if not, by research councils in donor countries, which are increasingly aware of the potential policy and practice impact of what they fund. What follows, therefore, is less a matter of basic scientific research and more about a close, but complex, relationship between academic and aid agendas. Indeed, many of the authors whose work will be encountered in the rest of this introduction have been employees or contractors of and secondees to major development agencies, though much of the research is also highly critical of those agencies' policies.

In the next section, we consider what we argue are the five main strands of current literature on VET / skills for development. In reality, the boundaries are often porous and the categories are primarily a heuristic device for telling a story about the field. We begin with a literature that focuses primarily on VET as a set of educational practices and as largely something that takes place in public VET colleges. Second, we switch to look at the economics of education literature. Such studies can be classified into two camps: one examining the efficiency of public VET programmes and another investigating the determinants of the quality of human capital. As a recent trend, we review works which pay close attention to varieties of skills and their implications for productivity in workplaces. Third, we point out the limitation of the conventional approach of VET studies which tends to take the centrality of the public sector in designing and regulating the VET system as granted. Referring to the social constructivist tradition, we call for building the understanding of skills based on the realities and voices of workers and employers. Fourth, we then move to the question of how skills systems are formed and reproduced at the macro level, which sits within wider political economy debates about developmental processes. Finally, we consider a more disparate set of approaches that start from the political economy tradition but which bring perspectives from other social theories (e.g., human development, political ecology, critical realism) to offer multiscalar accounts of skills and development in which public VET colleges and formal firms are important but alongside a wider range of actors, and where the social purpose of VET is asserted alongside the economic, with a growing concern too with the environmental dimension.

3. Literature on VET and skills for development

3.1. Research on VET as formal educational practices

The vast majority of research published on VET in developing countries is practice-focused, concerned with improving classrooms, curricula and colleges, largely in the public sector. In keeping with wider trends in the production of education research knowledge, little of this has found its way into mainstream international peer-reviewed journals due to its limited engagement with theory, advanced methods or international debates.

Nonetheless, there is a strand of higher quality work of this kind in international journals and much more in Southern national and regional journals (we are mindful of the problematic hierarchy inherent in this classificatory system). For Africa, McGrath et al. (2020a) classify this literature as having two main forms: teaching and learning (increasingly including vocational teacher education), and institutional leadership and management. This schema seems to apply largely to other regions.

Key learning and teaching focused topics include curriculum (Muwaniki et al., 2022); pedagogy (Zhao and Ko, 2020); student support (Papier and McBride, 2018); vocational teacher education (Muwaniki

and Wedekind, 2019); and educational technologies (Bekolo and Shao, 2018). The management literature has focused largely on improving public vocational providers' internal systems (Gao et al., 2006) and external relations (Li and Sheldon, 2014). In this special issue, (Mori, 2023) examines the motivations of employers in providing training for their workers. He argues that public VET institutions should enhance training in generic skills, which will set the foundation for continuous learning after employment.

Whilst this formal educational practice-focused literature, of course, is important, it tends not to consider wider questions of VET's role in development, our concern in this special issue. Hence, we will devote it less space than any of the next four strands of research.

3.2. Economic analysis of education and skills

As we discussed earlier, two perspectives have dominated the economic analysis of skills development: one from the supply and the other from the demand side. The former focuses on the cost-efficiency of the VET system, while the latter pays attention to the labour market demands for skills and education.

On the supply-side, the most famous approach is rate of return analysis, most notably a series of studies by Psacharopoulos (e.g., 1981, 1985), which derive huge influence from his status as the World Bank's long-term lead economist of education. This wider literature apparently proved the policy case for disinvestment from VET, as part of the rise of the education for all orthodoxy (McGrath, 2018). This literature purported to show that VET generated far lower returns than primary or academic secondary education, although the empirical basis has always been subject to contestation (Grootaert, 1990; Bennell and Segerstrom, 1998).

A significant question here is the generalisability of such studies. The research framework is driven by Western theories whose relevance to the other contexts is not tested. Critics have argued the approach is least applicable in the least developed countries, characterised by informal sector dominance and relatively large public sectors (Bennell, 1996; Bigsten et al., 1998). This question of the applicability of Northern theory to VET and development is one that will be recurrent in this special issue.

In the ROR analysis, per-student expenses (unit costs) covered by the government are treated as social investments, to be compared to the individual returns (wages) or their aggregates. Therefore, the accuracy and comparability of governmental expenditure data are crucial for the reliability of this type of analysis. However, this is not guaranteed. For example, one of the authors discussed that the classification of educational subsectors used by the UN and Western countries itself is not universal, sometimes requiring non-western donors to reclassify their aid disbursements to meet the international reporting requirements (Yamada, 2016b). VET is particularly an ambiguous category whose boundaries with workplace training programmes or apprenticeships differ according to the tradition of national systems and their culture. This fact leads to a reservation about trusting the comparability of public financial data of multiple countries.

From another angle, it needs to be remembered that learners, families and governments are not necessarily making investment decisions based on some notional average rate of return. Rather, household strategies of resource distribution and popular beliefs about job opportunities are the major drivers of family decisions on schooling (Cameron and Worswick, 2001; López Bóo, 2010), while at the government level, politics among ministries or parties affect investment decisions (Falch and Rattsø, 1999). Moreover, the rates of return from VET depend on the dynamics of particular industrial sectors, and these might deviate far from the mean across the economy as a whole.

Other forms of supply-side research include work examining the differential effects of educational tracks on labour market outcomes (wages, employment status, etc.). This is a part of the tradition which compares differential patterns among groups by using categorical

variables such as “VET graduate or not” or “Female or not”. There are much broader variations in this tradition than in ROR, because both the dependent and independent variables can be set more freely, even if the researchers’ interests are still in VET’s efficacy. [Choi, Li and Ogawa’s paper in this special issue](#) reflects this tradition. Using data from the 2014–15 Indonesian Family Life Survey, they explore whether vocational upper secondary schooling results in decent work. Removing self-selection and endogeneity biases, they find no significant differences in labour market outcomes by gender or by educational track. Recently, the focus of educational discourse has shifted greatly to learners’ problem-solving skills rather than years of education provision. Accordingly, increasingly studies demonstrate the effects of VET on improving noncognitive or problem-solving skills ([Kahyarara and Teal, 2008](#); [Yamada and Otchia, 2018](#)).

As for demand-side research, it has predominantly been a field of labour economics which treats education as one of many determinants of workforce productivity. In human capital theory, human capacities, including knowledge and health, are considered to be important contributing elements to economic growth. Conventionally, as there were no direct measures of knowledge, years of schooling were used as its proxy. Whilst this might be a reasonable measure of day-to-day enrolment in the North, it is far less reliable across much of the South ([Permanyer and Boertien, 2021](#)). Moreover, as recurrent bouts of “crisis of learning” moral panics note, there can be very major differences between developed countries in terms of time actually devoted to classes ([Karamperidou et al., 2020](#)) and even more so regarding levels of actual learning ([Oketch et al., 2021](#)).

[Hanushek and Woessmann \(2007, 2012\)](#) have pioneered a stronger econometric approach that uses the scores of learning assessments instead. There also has been a growing tradition of assessing the knowledge of adults who left school ([Allen and van der Velden, 2001](#); [Green and McIntosh, 2009](#); [Pellizzari and Fichen, 2017](#)). The flourishing of this type of work owes greatly to the international learning assessments of adults, such as the OECD’s Programme for the International Assessment of Adult Competencies. This has been predominantly Northern-focused but developing countries are joining the programme.

Whilst the econometric approach to analysing VET and development has largely derived from existing datasets, and been hugely dependent on the quality of these, including administrative data, the last decade has seen far more prominence be given to evaluation research on large-scale donor project interventions, often using experimental methods.

The demand-side approach focuses on what have come to be known as non-cognitive skills. It is now well-established that interpersonal or problem-solving skills are a significant determinant of labour market outcomes ([Bowles et al., 2001](#); [Heckman and Rubinstein, 2001](#); [Kurikova et al., 2015](#)). There also are numerous reports that employers tend to rate attitudes and personality characteristics higher than cognitive skills when they recruit and employ new workers ([Keep and James, 2010](#); [Centre Européen pour le Développement de la Formation Professionnelle, 2013](#)).

In labour economics, learning during employment is treated as “experience”. But, again, except for years employed, there has not been any direct measurement for this ([Serneels, 2008](#); [Tchernis, 2010](#)). Although it is accepted that learning is lifelong, the division between education and experience has been slow to break down. Challenges still remain with assessing workers’ skills directly and holistically. Measures must be sensitive to the specific work setting while being comparable across contexts, and the effects of school credentials clearly disaggregated. This new focus on learning among Southern learner-workers will be explored in greater detail next.

3.3. From institutionalism to constructivism

In [Section 3.2](#), we discussed that supply-side research examines VET’s institutions’ efficacy in cultivating skilled human resources. Meanwhile, in labour economics, the suppliers of skills are individuals

themselves, not the institutions which prepare them for the world of work ([Hall, 1991](#)). The difference in the notion of “supply” between development studies and labour economics indicates divergence in underlying assumptions. Development studies assumes the dominant role of formal institutions, particularly those in the public sector, to regulate and facilitate the developmental process of society. On the contrary, labour economics assumes the primacy of the labour market mechanism, through which workers exchange their abilities with job opportunities or better treatment by means of direct and indirect negotiation with employers ([Kregel, 1988](#)). Skills development discourse has been led by the international aid community, whose counterparts are predominantly national governments. Therefore, it must have been natural that the policy prescriptions, accompanying methods and tools, and justifications behind them all take the paramount position of the government as given. In other words, public-sector-driven models of VET owe some part to the pragmatism of the international aid community to design the system without giving rein to the unpredictable “market mechanism”. The establishment of VET programmes, curricular development, teacher training and allocation of resources to run the VET system are all in the domain of governmental planning.

As we have discussed earlier, there have been different trends of VET policies over time. Periodically, partnership with the private sector and civil society organisations is promoted. Still, the main actors are considered to be the government and public VET schools. A significant side effect of such policy-oriented pragmatism was that too few academics questioned the conceptualisation of the skills development mechanism as based on government policies and VET institutions. Such an institutionalist imagination of skills development seems to be based on the presumption that human activities, such as learning or working, can be regulated by institutions whose functions are defined clearly and in mutually exclusive manners. According to such thinking, the place to learn is different from the place to work.

However, this is clearly fallacious. Skills formation is lifelong and lifewide. Moreover, it is not linear, centred on a definite transition from learning to working, but complex and context-dependent. This leads some researchers to emphasise empirically observing ways skills are demanded and used in the lives of people who embody them, instead of taking the models and logic of the public VET structure and educational programmes as paramount. This is fundamentally a bottom-up, inductive approach, based on the idea that there is no universal package of essential or employable skills. Rather, the meanings of desired skills are constructed through interactions between employers and employees, or between the members of communities that require skills and individuals who want to participate in such communities ([Lave and Wenger, 1991](#)). According to social constructivism, knowledge is shaped through the exchanges of perceptions about what counts as meaningful knowledge among subjective agencies ([Prawat and Floden, 1994](#); [Goldman, 1999](#)). Adoption of this constructivist approach enables a departure from institutionalism, both theoretically and methodologically. It is argued to be a contrasting epistemology to an authoritarian one, which some claim lies at the bottom of institutionalism ([Ramirez and Ventresca, 1992](#); [Romanish, 1995](#)). They critique the way that knowledge is legitimised by the higher-order decision-makers who then design school curricula, train teachers or develop occupation standards. Such an approach is seen as resulting in learners being passive absorbers of pre-set knowledge, with efficiency and effectiveness seen as residing in standardisation of educational processes.

In contrast, the constructivist analysis starts with the realities and perceived needs of skills in particular contexts, which are necessarily subjective and relational. The skills appreciated by employers change according to the industrial environment and customers’ needs. Meanwhile, aspirant workers internalise tacit expectations in the workplace, with those who have skills meeting the value framework receiving better rewards. Put differently, the notions of “good” or “necessary” skills are jointly constructed by skills demanders and wishful entrants to the community. Here, the focus is on the mental process through which the

valuing of skills takes shape rather than labour market mechanisms. As new broader values, e.g., regarding greening, emerge, so those skills that are valued change. The constructivist analysis seeks to identify the exact nature of skills demanded and their mis/matches with supply, together with the potential reasons behind any mismatches. This allows it to be more solution-oriented than either the market or institutional accounts, and not to look for solutions as existing only within the world of public VET.

There is a danger that the close focus on skills *in situ* may mean that it is difficult to rise above the context of the case. Yamada's paper in this special issue is an attempt to overcome this limitation. She describes how her team developed a standardised skills assessment module, designed to investigate various types of skills workers have and those that are valued by employers. Using this approach over two country contexts, Ethiopia and Ghana, allows a deeper analysis of commonalities and differences. While maintaining comparability, this module attempts to construct unique sets of valued skills in specific contexts. The data is quantitative but its interpretation leads to the bottom-up construction of a shared notion of skills. As a significant commonality across contexts, the paper points out the importance of noncognitive skills. Estrellado, Charoenslip and Yamada's paper from the same project, explores their development of a training programme using board games. Based on the behaviour modelling approach, this is meant to improve noncognitive or soft skills through participating in games whose settings are similar to their workplace. The instrument used to examine the intervention's impact was the same standardised assessment as in Yamada's paper, implemented before and after training.

3.4. The political economy of skills tradition

Another way beyond the practice level literature's concerns with individual classrooms and institutions of the public VET system is provided by the political economy of skills tradition. It is an institutional account but in the sociological sense of that word as being concerned with the rules of how skills development operates. It was originally concerned to show how European skills formation systems developed and are reproduced. Always containing a comparativist element, this literature began to look beyond Western European cases from the late 1990s. A literature emerged on skills formation in East Asia (Crouch et al., 1999; Brown et al., 2001), which built on the existing political economy work on the East Asian developmental states (Amsden, 1989; Wade, 1990), identifying skills policies as an important factor in rapid industrialisation and the political and economic compromises that made this possible. At around the same time, the approach started to be applied to South Africa as the transition to democracy in the mid-1990s opened up a moment for policy borrowing that envisaged a large role both for the state and trade unions in a transformed economy. Given the history of Apartheid and economic sanctions, skills development was seen as a key tool that served urgent goals of an inclusive growth strategy (Kraak, 1996; McGrath, 1996). The Allais, and McGrath and Lugg papers in the 2012 special issue are examples of this South African school of political economy of skills research. It appears that the political economy of skills approach, with its roots in readings of advanced capitalist societies, proved easiest to expand to economies rapidly moving in that direction or with large advanced sectors.

In her paper in this special issue, Allais builds on this South African tradition to look at Africa-wide evidence regarding how the toolkit continues to be adopted across Africa. She contrasts the enthusiasm for the approach with the scant evidence for its effectiveness and its apparent unwillingness to engage with the realities of African education systems and labour markets, which remain dominated by informality. Rather, she argues, what matters is the internal logic of the toolkit's reform processes, notwithstanding their lack of credible theories of change.

Since the 2012 special issue, we have seen a further geographic spread of the approach. This has still largely been to wealthier and more

developed countries in the South (such as Chile, Mexico, India and China, e.g., Zancajo and Valiente, 2019; Pilz and Wiemann, 2021; Röhrer et al., 2021). However, more recently, work of this kind is beginning to spread further. Hence, in this special issue we see work that draws on aspects of the political economy tradition focusing on Bangladesh and Uganda (Maurer, Haolader and Shimu, *this issue*; Ramsarup, McGrath and Lotz-Sisitka, *this issue*). As it moves South, the political economy tradition has seen the development of greater historical depth as it goes beyond a focus on industrial revolutions to understand longer term historical developments in political economy, most obviously the impact of colonialism (Allais, 2020; VET Africa 4.0 Collective, 2023). Here, the approach echoes concerns by authors such as Arrighi (1994) to place the "long twentieth century" into wider historical context.

From early in its use in South Africa, and as it gets deployed across more of the South, the approach has been a point of intersection between the comparative education and VET research traditions, with leading authors writing in both fields. This has seen explicit drawing on debates about policy learning / transfer, for instance (McGrath and Badroodien, 2006; Jaramillo, 2012; Li and Pilz, 2021) that reflect the wider comparativist concern about the centrality of context (Crossley and Jarvis, 2001).

In divergence from this comparativist tradition, however, the approach has also seen a move beyond a concern with national systems of skills formation to a growing focus on regional and sectoral developments, reflecting the unevenness of capitalist development in countries of the periphery. This is a direction particularly of the South African literature (e.g., Kraak, 2009; McGrath, 2015; Wedekind and Mutereko, 2016; Wedekind et al., 2021). Here it has increasingly adopted a skills ecosystems approach (Lotz-Sisitka, 2020; VET Africa 4.0 Collective, 2023; Ramsarup et al., *this issue*), an approach also used by Brown (2022a) in India, Bravo et al. (2022) in Chile, and being drawn upon by Wignall, Piquard and Joel in West Africa (*this issue*).

3.5. A post-political economy of skills?

One thing that characterises much of the recent Southern literature in a broadly sociological tradition is that it builds on the political economy of skills approach but adds in other theoretical insights. Thus, this is not so much a single tradition as a series of developments in the past ten years that begin largely from the same starting point.

An early step in this regard was by Kruss et al. (2015), who drew upon the longstanding technological capabilities strand of development economics to develop a stronger firm and industrial cluster level account of sectoral skills formation processes.

A more significant recent move has been to engage with the critique of the political economy approach as too structuralist through recourse to critical realism. Maurer, Haolader and Shimu and Ramsarup, McGrath and Lotz-Sisitka (both *this issue*) are examples of this move (see also Powell and McGrath, 2019; Aldinucci et al., 2021; Ramsarup et al., 2022; VET Africa 4.0 Collective, 2023). Three main strands have emerged, all drawing on different aspects of the critical realist tradition to offer distinct responses to the political economy approach.

First, there is the development of an ontological underpinning for the sectoral-spatial turn in the literature through engagement with Bhaskar's (2010) account of lamination. Ramsarup, McGrath and Lotz-Sisitka (*this issue*) apply Bhaskar's insight that structure and agency work in complex ways across a range of levels from the individual psychological level to the global systems level but that no one level determines any other level, and that each is ontologically distinct. This move opens up the possibility of better connecting practice-level analysis with sectoral and systemic work, a major fissure in the field. Importantly, it does not claim that any of these levels are more important than the others; simply that none can be thought of without considering other levels.

Second, there is an exploration of student agency. Drawing particularly on Archer's later work (2003 and 2007), research on South Africa

and Chile (Powell and McGrath, 2019a; Aldinucci et al., 2021) has sought to insist on the agency of young people navigating vocational systems without downplaying the powerful structural effects of the wider political economy. One aspect of this is a strong focus on young people's aspirations and the potential for vocational education and training to expand their aspirational horizons (Powell and McGrath, 2019; McGrath et al., 2020b).

Third, Maurer, Haolader and Shimu (this issue) draw on Archer's earlier work (Archer, 1982) to outline a more nuanced account of how national skills formation systems emerge through the complex interplay of structure and agency over time. This allows them to argue for an alternate take on the political economy of skills account and how it can be made more applicable to less developed contexts. This approach allows them to point to the complex relationship between government and donor rhetoric and the agentic shaping of skills policy as well as to the limited purchase some of the policy language has given the realities of economic and labour market structure. Here the paper explicitly reinforces and develops further McGrath and Lugg's critique of the global VET toolkit in the 2012 special issue.

A number of accounts (Powell and McGrath, 2019; McGrath et al., 2020b; Aldinucci et al., 2021) have attempted to build a bridge between political economy and the capabilities approach, often using critical realism as a means of addressing the apparent structure-agency gulf between the two traditions. This approach foregrounds youth agency, as noted above, but also draws on multidimensional accounts of poverty and highlights gender (see also De Jaeghere, 2017, and Lynch et al.'s use of this approach in this issue).

Crucially, another central element of this approach is an insistence on acknowledging the complex realities of work globally. The political economy tradition has largely been as guilty as the human capital tradition in seeing paid, formal, indeed often industrial work, as the norm (but see Allais' paper in this issue). Yet, it has never been the majority experience of adults of working age in any society. Indeed, even if we ignore women and work, any claims that the twentieth century was the "century of the labouring man" (Standing, 2002) seem of a different age nearly a quarter of the way into the twenty-first century. Rather, work looks very different from this in different contexts in Africa (De Jaeghere, 2017; Alla-Mensah and McGrath, 2021; VET Africa 4.0 Collective, 2023) and Asia (Hilal, 2019; Thorne, 2021; Brown and Ali, 2022). In this issue, Dagar's paper also contributes to this literature by adding the lens of refugees' experiences in India, as does Lynch et al.'s exploration of the experiences of disabled youth in Bhutan, and Wignall, Piquard and Joel's account of female experiences of skills and work in Cameroon and Sierra Leone.

This capabilities-informed expansive approach to work is also seen in other recent research that has revisited skills in the informal economy and rural settings (Brown, 2018; Lotz-Sisitka, 2020; Jjuuko et al., 2021; VET Africa 4.0 Collective, 2023; Muwaniki, Wedekind and McGrath, 2023).

Another, very recent, move in this literature considers what the growing realisation of the climate emergency and the urgency of just transitions mean for skills development systems (Ramsarup, McGrath and Lotz-Sisitka, this issue). Here, work on green skills and a critical realist-inflected political economy of skills has led to an argument for a political economy-ecology of skills (VET Africa 4.0 Collective, 2023; Lotz-Sisitka et al., 2023), mirroring wider moves to see the current environmental crisis as arising from advanced capitalism (e.g., Malm, 2016; Moore, 2017). However, in stressing the importance of the climate crisis and drive towards just transitions as global phenomena, Ramsarup, McGrath and Lotz-Sisitka's critical realist stance lead them to insist that the challenges cannot be solved simply at one scalar level but require thinking and acting both in a multiscalar and relational way.

One even more recent emerging trend within the skills and development debate is the much overdue start of a conversation between the political economy tradition and what might be termed the anthropological-geographical tradition. This latter literature has moved

through a focus on skills formation in classical anthropological settings with indigenous peoples (Ingold, 2000), to an engagement with traditional apprenticeship and other skills formation systems in the informal sector, largely in South Asia (de Neve, 2005), and to a consideration of skills formation and use in various forms of service work in Indian cities (Gooptu and Chakravarty, 2018). The paper by Wignall, Piquard and Joel (this issue) is one of the first papers to seek to bridge the gap between these two traditions (see also Brown, 2022b), and we are aware of several more in development.

In the UNESCO processes that were mentioned at the start of this paper, it was argued that VET had to be seen through three lenses regarding its purpose. The conventional economic dimension of VET for employment, productivity and employability was reaffirmed as crucial. However, the environmental, seen above in the move towards skills for sustainable development, was argued to require far more attention. Then the third dimension was that of equity and inclusion. In the previous IJED special issue, McGrath (2012) sought to take this debate forward by applying Tomaševski (2001) rights-based approach to VET and this has had some traction in the intervening period. This period has also seen the rebirth of a VET and development tradition concerned with inclusion. This is reflected in the current special issue in foci on gender (Wignall, Piquard and Joel), disability (Lynch et al.) and refugees (Dagar). Each of these papers draws in different ways on the critical capabilities approach to VET (McGrath et al., 2020b). Through this, they all look at how marginalised groups are faced with significant structural challenges, some of which are cultural in origin. They each examine how individuals within these groups are trying to aspire to better lives that transcend and even transgress what is expected from them. All three papers then ask what skills development can do to support them.

Wignall, Piquard and Joel draw on data from Cameroon and Sierra Leone that looks at attempts to build a "gender-transformative future for TVET", harking back to McGrath's opening paper in the 2012 special issue. In imagining a transformed future, they are very clear in their critique of the patriarchal underpinnings of mainstream vocational provision. They build on the critical capabilities approach to VET, drawing especially on the work by Hilal (2019) as well as recent moves towards blending CCAVET with skills ecosystems accounts (McGrath et al., 2020). Following the CCAVET tradition, they also look strongly at aspirations, but follow Brown and Ali (2022) in exploring how "transgressive skills" can be built that move beyond cultural norms.

Lynch et al. consider the experiences of Bhutanese youth living with disabilities in trying to access the labour market. They consider the aspirations that these youth have towards meaningful work and lives and how barriers to achieving these might be overcome.

Dagar focuses on refugee experience in India and how this is affected by the differential attitudes and approaches taken to different groups by the Indian state. Overall, government and donors take a simplistic view that refugees should be neoliberal entrepreneurial subjects. However, Dagar critiques this and argues both for a more intersectional understanding of the interplay between individual agency and structural effects, and for a greater focus on the wellbeing and capability achievement of refugees that would facilitate supporting them more effectively to be agents of their own human development.

Across these recent developments there is a desire to take an expansive and transformative view of VET and skills. They expand what counts as VET, offering a focus that transcends public VET institutions or formal workplaces, and sees VET as occurring across a myriad of settings. They also seek to expand the notion of VET's purpose to encompass such considerations as decent work, social inclusion, human flourishing and climate action. In doing so, they also share a transformative vision that VET can and must be part of wider processes of both educational transformation and transformation of the world (Tikly, 2020).

4. Skills futures and the future of VET and development research

It seems likely that all the main traditions above will continue. Future developments of each cannot be separated from debates about the future of work, particularly of formal and industrial work. There continues to be much policy interest in the Global South regarding the Fourth Industrial Revolution but there is a paucity of good academic work that backs up the techno-utopianism, with political economists remaining of the opinion that unequal access to skill, work and incomes will remain whilst the model stays firmly within the confines of capitalism (Avis, 2020). Some work within the broader political economy of skills tradition recently has been commissioned by UNESCO that looks at skills futures in a broader and more equitable way (Buchanan et al., 2020; McGrath, 2022). This places any discussion of new technologies within wider contexts of the climate crisis; changing life courses (especially life expectancy, levels of educational attainment and women's workforce participation); and changing levels and forms of inequality. Even on the question of technology, Buchanan et al. remind us that "The ultimate configuration of jobs and occupations depends on social and political choices within the possibilities created by technology." (Buchanan et al., 2020: 6). Both the constructivist account and the South African strand of green skills work offer fruitful ways of getting into detailed, contextual analyses of what skills are available and which are needed now and in the near future. In different ways, they try to engage with how to bridge any gaps here.

Within the broad sociological tradition of thinking about skills and development, the theoretical hybridity of the recent past looks likely to continue. Recent engagements between political economy accounts and critical realism, the capability approach, geographies of skills and political ecology are likely to deepen, with other traditions also being drawn upon in ways that are not easy to predict from here. This will lead to continued tensions within this broad camp over such matters as the interplay between structure and agency; questions of scale; and the degree to which analysis should move beyond the formal frames of both education and industry. However, what they share in common, and with the constructivist account, is a strong sense of the importance of context and the need to eschew either simplistic structuralist or agentic accounts. These accounts also agree on the limits of policy transfer by donors and of ascribing uncritical importance to the state as a development actor.

It is a sign of one of the key journeys still ahead of the field that this special issue has a majority of first authors from OECD countries, although the Asian inflection of this is welcome. Of 10 first authors (excluding this piece), three each are from European and Asian OECD countries, with two each from Africa and other parts of Asia. Nonetheless, the recent past has seen a significant increase in Southern presence in major conferences and journals on vocational education and training, and this is likely to continue.

Half of this special issue arises out of large Northern-funded research programmes and these, and the development agency-funded nature of much of the economics of VET literature, still have a tendency towards external project leadership (and output authorship) and an approach to research that is as extractivist as much of the industry located in the South. Nonetheless, a number of the projects reflected in this special issue have sought to move beyond traditional approaches and their hierarchical relationships. In particular, there is much more sensitivity about how researchers and their organisations can be responsible long-term participants in skills ecosystems rather than entering them briefly to extract data.

McGrath and Lugg's paper in the 2012 special issue was concerned with the gap between academic research and policy logics regarding VET and the inadequate evidential basis for VET and development policy has been a major theme of Allais' work in particular (2014, 2022 and this issue). In the constructivist and critical realist accounts, we can see different attempts to insist on going beyond the formal frame of government and public VET to look at a range of sites and actors who

straddle the worlds of work and learning, and to think in terms of relationality, ecosystems and networks.

We have shown that the period since the last IJED special issue on skills has witnessed important areas of progress in the field. A greater Southern visibility in major journals and conferences is an important step forward, though there is much further to go. Across the special issue, the growing range of theoretical and methodological approaches in the field is a real strength. Importantly, there is growing engagement across traditions, with this special issue reflective of this. Clearly no one discipline, theory or method is sufficient to the task of understanding skills and development. Nonetheless, continuing the growing dialogue across these boundaries remains a major challenge for the field as we look forward.

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